www.rackmountsolutions.net

1-866-207-6631

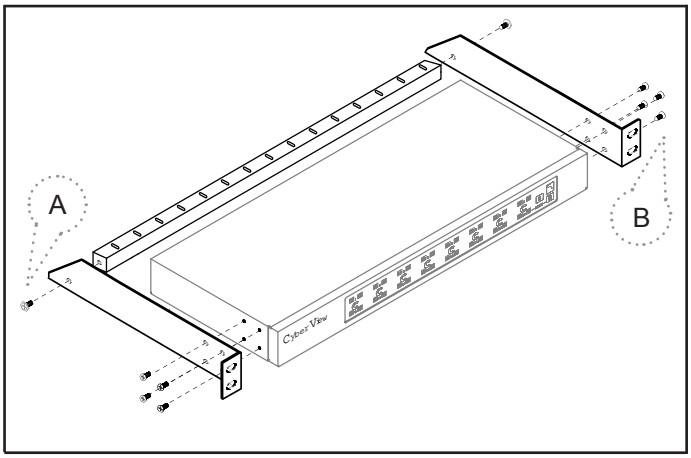
sales@rackmountsolutions.net

PS/2 DB-15 Cat5 KVM User Manual

CV-401 / CV-801 / CV-1601

CV-401 / CV-801 / CV-1601 PS/2 DB-15 KVM

Installation

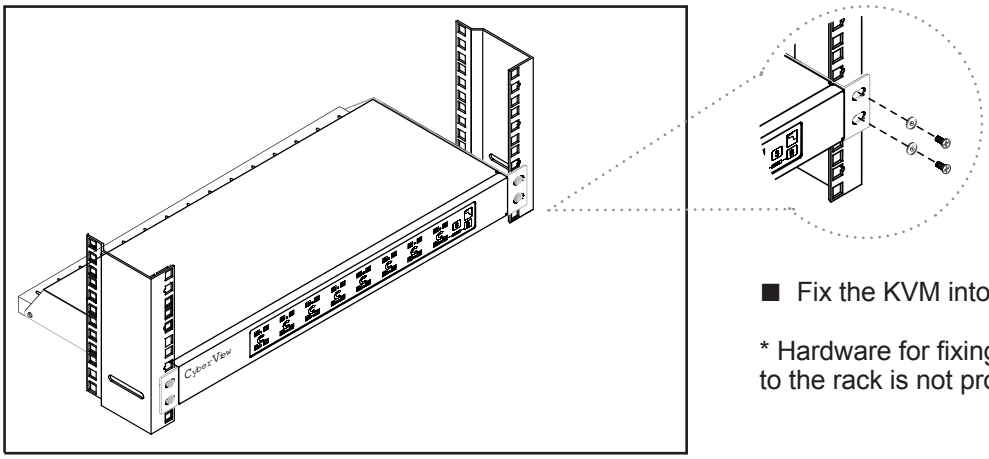


screw A: M3.2 x 4.5 mm

screw B: M4 x 10 mm

■ Install each bracket using screws provided shown in **Figure 1.**

Figure 1. Installing the bracket to the KVM.



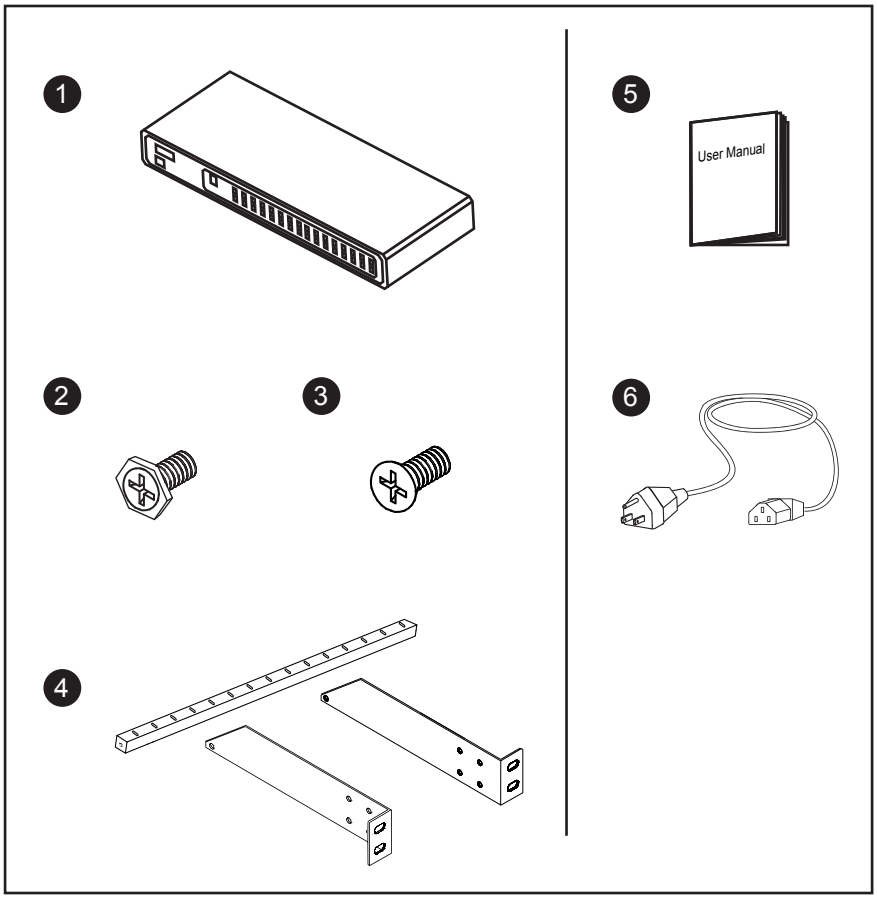
■ Fix the KVM into the rack

* Hardware for fixing the mounting bracket to the rack is not provided

Figure 2. Fixing the KVM into the rack.

CV-401 / CV-801 / CV-1601 PS/2 DB-15 KVM

Package Content (only for rackmount KVM)



① KVM switch x 1 pc

② Screw M3.2 x 4.5mm x 4 pcs

③ Screw M4 x 10mm x 8 pcs

④ Bracket x 1 set

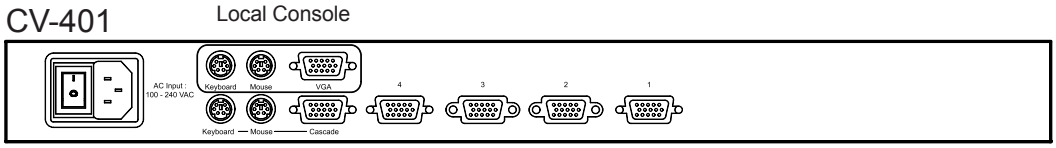
⑤ User manual x 1 pc

⑥ Power cord x 1 pc

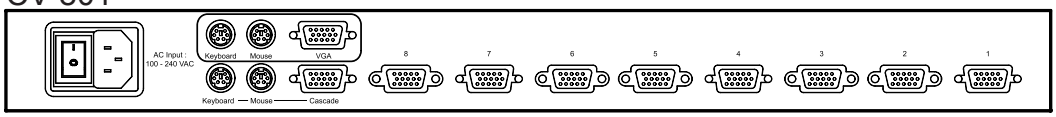
CV-401 / CV-801 / CV-1601 PS/2 DB-15 KVM

Connection

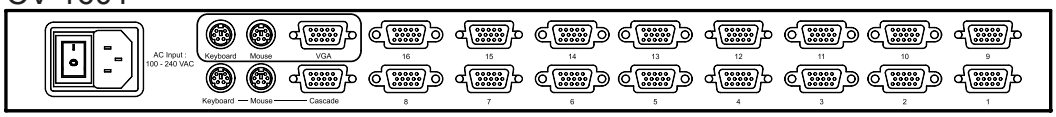
CV-401



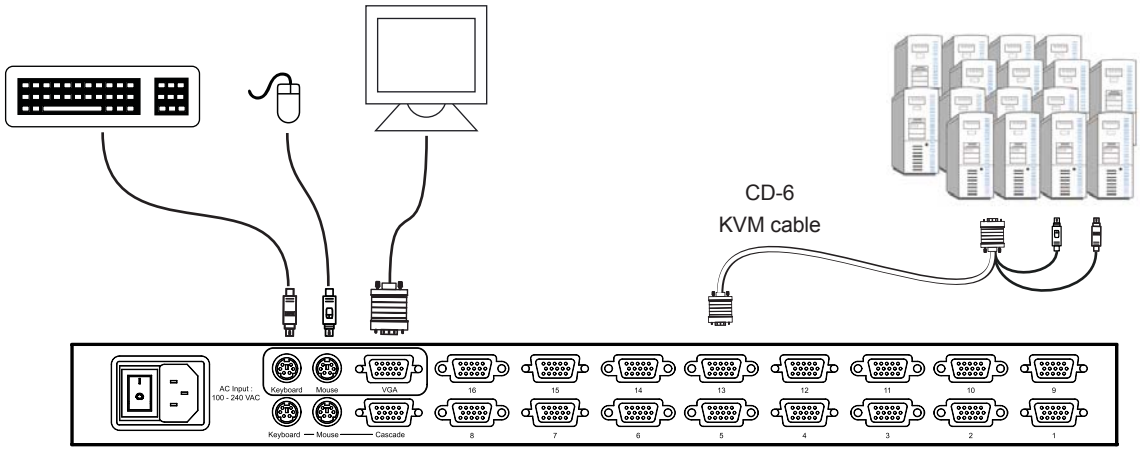
CV-801



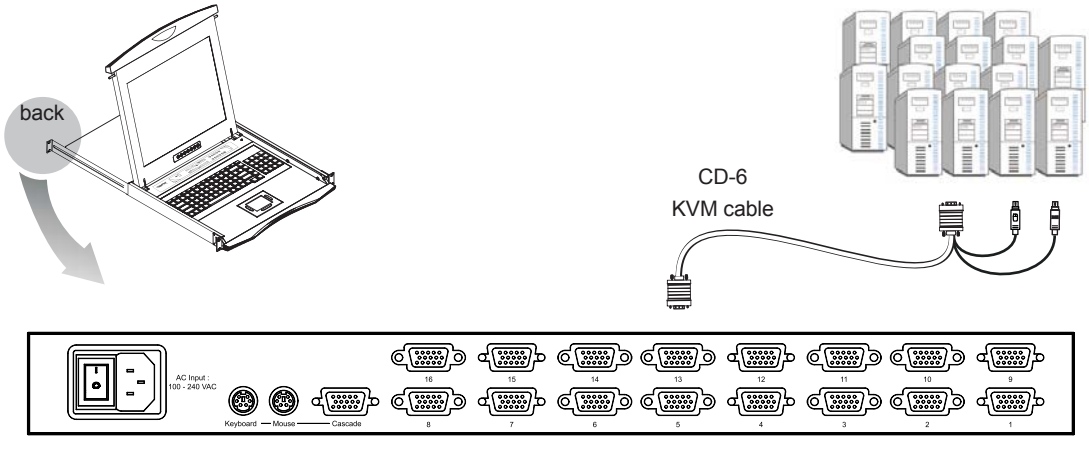
CV-1601



Connection
Rackmount KVM



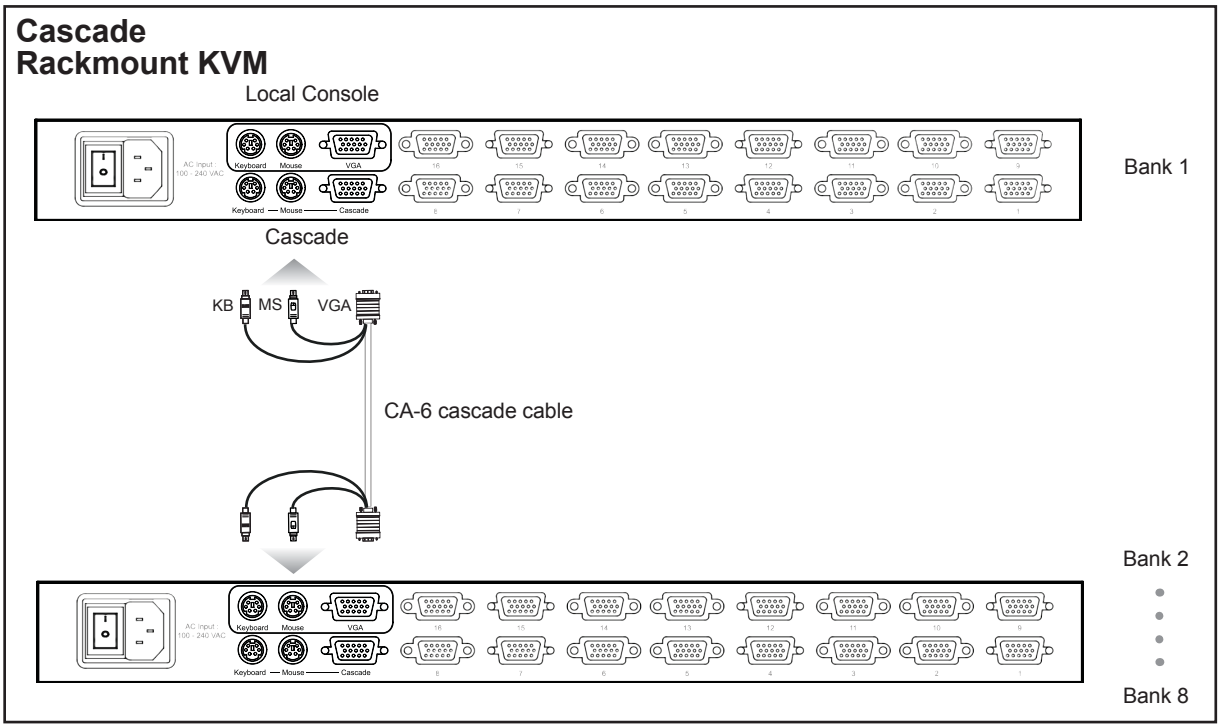
Connection
KVM modules

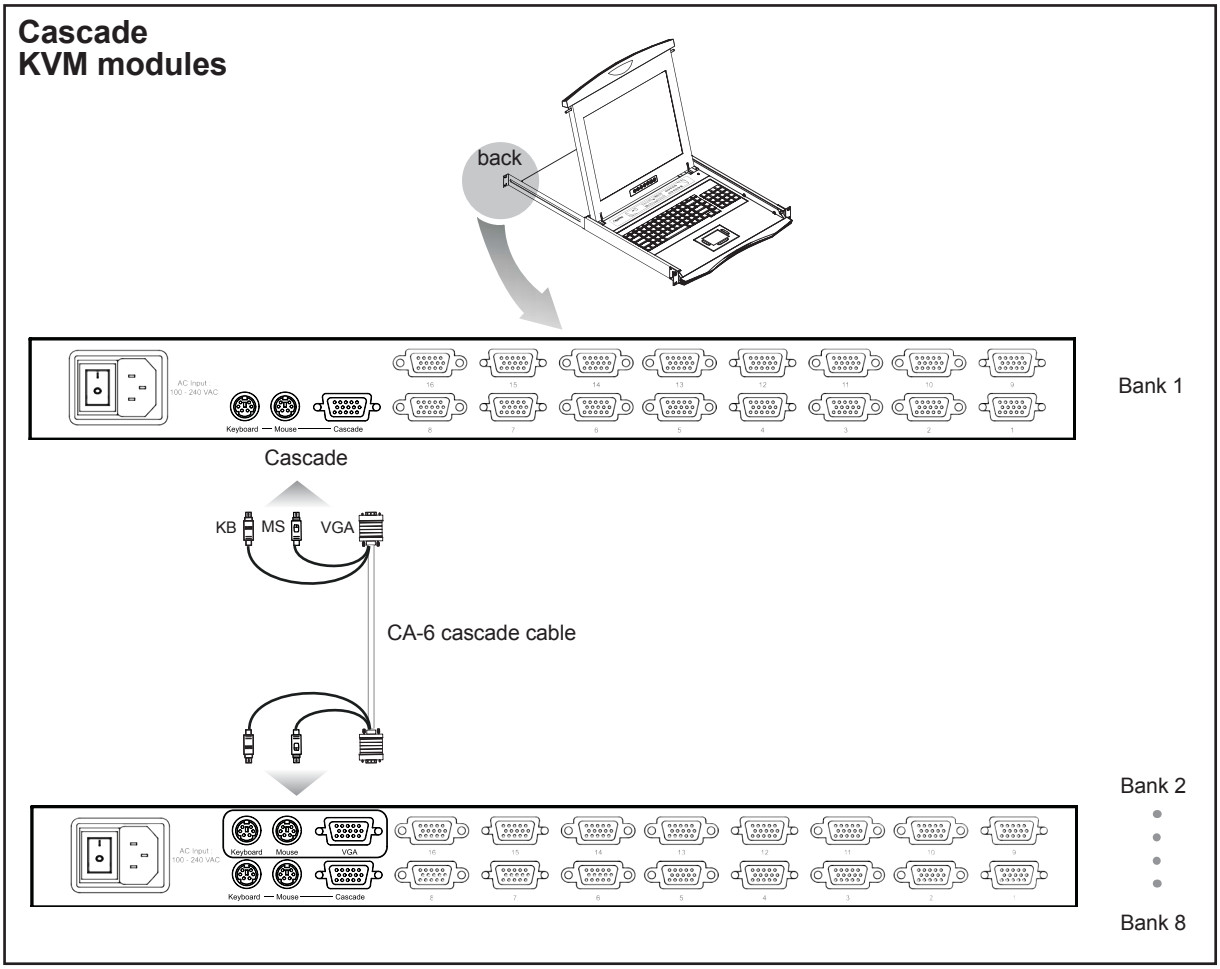


CV-401 / CV-801 / CV-1601 PS/2 DB-15 KVM

Cascade

- With the CV-401 cascade up to 116 servers. With the CV-801 cascade up to 120 servers. With the CV-1601 cascade up to 128 servers.
- Cascading multiple KVM by CA-6 cable





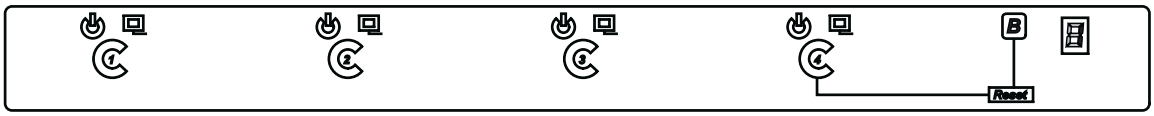
KVM Membranes

Power ON

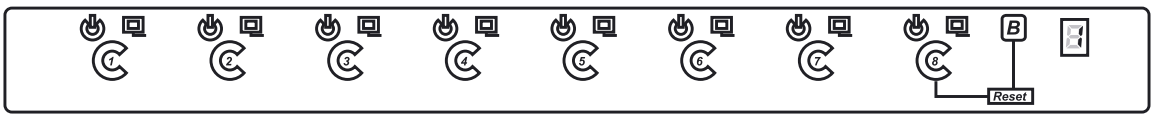
- Turn off all servers and KVM switches
- Make sure all cables / connectors are properly connected
- Recommend Power ON sequence is monitor, KVM switch finally computer

Front Panel - Port LED Indications

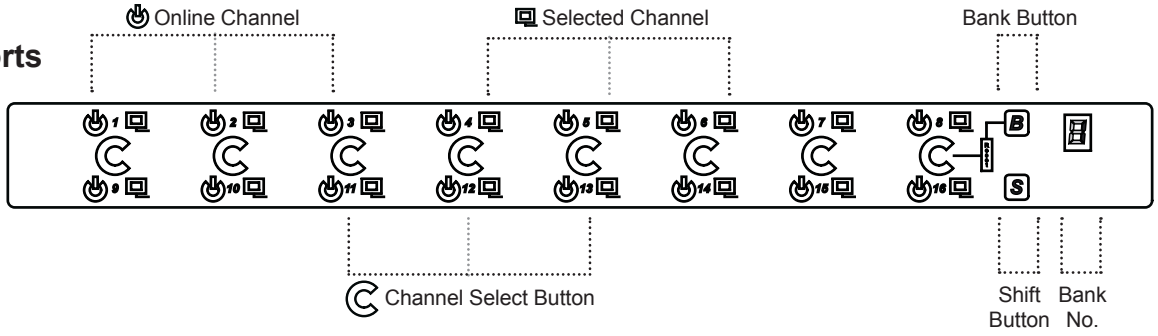
4 ports **(only for CV-401)**



8 ports



16 ports



Online Channel	**Green** LED on indicating a PC is connecting to the port
Selected Channel	**RED** LED on indicating a selected channel
Bank Button	Select the bank from1 to 8
Channel Select Button	Press to select channel from 1 to 8
Shift Button	Press & hold follow with a channel button to select channel from 9 to 16
Bank No.	7-Segment BANK LED indication

Password

Password for CV-401 / CV-801 / CV-1601

The password is enabled by default, the default password is “00000000” eight zeros **(Do not use “0” on number pad)**

■ **Set your own user name & password**

1. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
2. Select “CHANGE PASSWORD”
3. Enter “00000000” eight zeros in password field
   (Do not use “0” on number pad)
4. Set your own password in “ENTER NEW PASSWORD” field
5. Retype your own new password in “RETYPE NEW PASSWORD” field

Remark: a. Blank has underscore. SPACE does not have underscore.
b. Press any alphanumeric key to move to next input item.

■ **Change your password**

1. Call KVM OSD menu by pressing the KVM hotkey **Scroll Lock + Scroll Lock + Space Bar**
2. Select “CHANGE PASSWORD”
3. Enter your own password
4. Change your password in “ENTER NEW PASSWORD” field
5. Retype your new password in “RETYPE NEW PASSWORD” field

Remark: a. Blank has underscore. SPACE does not have underscore.
b. Press any alphanumeric key to move to next input item.

■ **Forget your password**

Please contact your supplier for further support

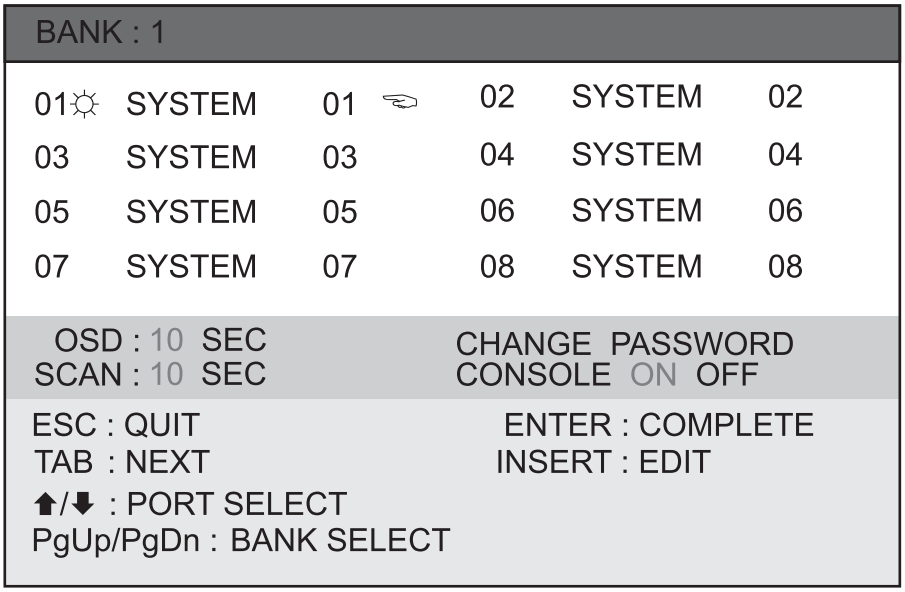
Remark:

■ You must press the KVM hotkey within 2 seconds

■ A beep sound will be heard for successful entering KVM hotkey

KVM OSD

OSD Menu for CV-401 / CV-801 / CV-1601



OSD operation

☼ next to the system name	The PC is powered on
☜ next to the system name	The PC is selected
OSD	OSD menu on screen time
SCAN	Scan interval from one PC port to next PC when applying auto scan
CHANGE PASSWORD	Change to a new password
Console ON/OFF	ON - quit the OSD menu without password OFF - password is requested while quitting the OSD menu
ESC	QUIT
TAB	NEXT
↑/↓	Select port for destination PC name and press “Enter” to select
PgUp / PgDn	To switch previous or next bank
ENTER	Complete
INSERT	Edit

KVM Hotkey

Hotkey for CV-401 / CV-801 / CV-1601

Hotkey	Function
Scroll Lock + **Scroll Lock** + **Space Bar**	Calling OSD menu
Scroll Lock + **Scroll Lock** + ⬆	Switch to previous port
Scroll Lock + **Scroll Lock** + ⬇	Switch to next port
Scroll Lock + **Scroll Lock** + **PgUp**	Switch to previous bank
Scroll Lock + **Scroll Lock** + Bank no. + Port no.	Switch to specific port
Scroll Lock + **Scroll Lock** + **PgDn**	Switch to next bank
Scroll Lock + **Scroll Lock** + **S**	Auto scan for powered on PC
Scroll Lock + **Scroll Lock** + **R**	Reset to factory default setting
Scroll Lock + **Scroll Lock** + **B**	Enable / Disable beeper sound
Scroll Lock + **Scroll Lock** + **F**	Find port by name

Remarks:

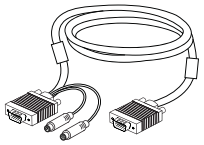
Example of "**Scroll Lock** + **Scroll Lock** + Bank no. + Port no."

- Bank No. : 1 to 8
- Port No. : 01 to 16
- e.g. Bank 1 Port 4 : **Scroll Lock** + **Scroll Lock** + **1** + **0** + **4**
- e.g. Bank 2 Port 16 : **Scroll Lock** + **Scroll Lock** + **2** + **1** + **6**

Optional Accessories

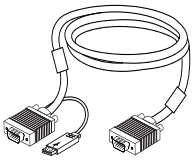
1. PS/2 3-in-1 KVM cable

1.1 CD-6 6 feet
1.2 CD-10 10 feet
1.3 CD-15 15 feet
1.4 CD-33 33 feet



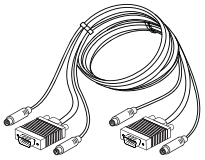
2. USB 2-in-1 KVM cable

2.1 CB-6 6 feet
2.2 CB-10 10 feet
2.3 CB-15 15 feet



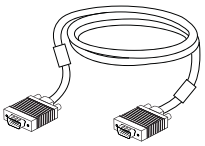
3. PS/2 KVM cascade cable

3.1 CA-2 2 feet
3.2 CA-6 6 feet
3.3 CA-10 10 feet
3.4 CA-15 15 feet



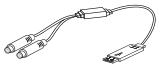
4. USB KVM cascade cable

4.1 CBC-6 6 feet



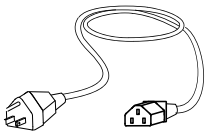
5. SUN / iMAC USB to PS/2 adapter

5.1 SUN-31 kit

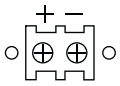


5. **Power cord**

5.1 IEC power cord
5.2 NEMA 5-15 power cord (US)
5.3 BS 1363 power cord (UK)
5.4 CEE 7/4 power cord (German)
5.5 AS 3112 power cord (Australia)



DC Power 12V, 24V, 48V Input



Model	12V	24V	48V
Input rating			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
Output rating			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
Ef?ciency	84%	85%	85%

Remarks:

- Package does not include power cord

Speci?cation

CV-401 / CV-801 / CV-1601	
■ **KVM Port**	
Number of ports:	4 or 8 or 16
Connector:	HDDB 15-pin
Connectivity:	CD-6 / 10 / 15 / 33 6' / 10' / 15' / 33' 3-in-1 PS/2 KVM cable
■ **Console**	
Graphic connector:	HDDB15-pin VGA
Resolution:	Up to 1920 x 1440
Bandwidth	200MHz
Input device:	PS/2 mini-din 6-pin mouse, PS/2 mini-din 6-pin keyboard
■ **On Screen Display**	
Port name:	Up to 10 characters long
Port select:	Front membrane button, Hotkey & On screen menu
Security:	Support eight character password
Auto scan:	5~99 seconds
■ **Expansion:**	Up to 128 servers by 8-level cascade
■ **Compatibility**	
Multi-platform:	Mix PCs, SUNs, IBMs, HPs, DELLs Server
Support:	Windows Vista / 2003 / XP / 2000, Linux, Netware, Unix, DOS
■ **Power**	
Input:	100 or 240V AC at 50 or 60 Hz via AC adapter
Option DC:	12V / 24V / 48V DC input
■ **Regulatory Approval:**	FCC, CE
■ **Environmental**	
Operating:	0 to 50°C
Storage:	-5 to 60°C
Relative humidity:	90%, non-condensing
Shock:	50G peak acceleration (11ms, half-sine wave)
Vibration:	58~100Hz / 0.98G (11ms / cycle)
■ **Product Information**	
Dimension (W x D x H):	CV-401 : 443 x 200 x 44 mm / 17.4 x 7.9 x 1.73 inch CV-801 / CV-1601 : 443 x 180 x 44 mm / 17.4 x 7.1 x 1.73 inch
Net weight:	CV-401 / CV-801 : 3.5 kg / 8 lb CV-1601 : 4 kg / 9 lb
■ **Packing Information**	
Dimension (W x D x H):	510 x 400 x 77 mm / 20.1 x 15.7 x 3 inch
Gross weight:	CV-401 : 4 kg / 9 lb CV-801 / CV-1601 : 4.5 kg / 10 lb

FAQ

General

1. How do the KVM switches allow the user to switch ports?

There are two ways to switch ports. One is the membrane buttons on the front and the other way is with Hot-key commands.

2. What operating systems do the KVMs support?

The KVMs support multi-platform support allows you to control Windows-based computers, Sun Solaris systems, Linux, or even Macs by a single KVM switch. The KVM switches support multi-platform operating systems including but not limited to DOS, Windows 95/98/ME/NT/2000/XP, Linux, Solaris and Mac OS.

3. Do I have to power down the KVMs to add a new server ?

The KVMs are hot-pluggable and allows servers or devices to be added or removed without powering down the switch, but components of connected devices, such as the servers, may not be hot-pluggable. We suggest that turn off power to all devices before connecting them.

4. Why I can't login with default password on KVM switch

The default username and password for the KVM switch is eight zeros - "00000000". Please check

i. The "Num lock" is not turned on. (for notebook type keyboard)

ii. The numeric (number) keys on the number pad are not accepted by KVM, only the main number keys.

5. Can I disable the KVM password ?

Yes, for Cat5 KVM, USB KVM, two console PS/2 KVM & IP PS/2 KVM, user can disable/ enable the KVM password by hotkey.

No, for PS/2 KVM, user can't disable the KVM password.

6. What do I do if I forget the password?

If the user change the default password and lose the password, pls contact the supplier for further support.

7. How many levels of KVM cascade are supported?

8 levels are supported.

8. Can I cascade the different types KVM switches together ?

No, only same type KVM can cascade together. (e.g. PS/2 to PS/2, USB to USB,..)

9. Why am I getting ghosting images or shadowing?

i. Check that all video cables are inserted properly.

ii. Check whether the KVM supports the resolution and refresh-rate on your servers.

iii. Check whether the graphics card you are using supports the resolution and refreshrate on your server or not.

iv. Connect the monitor directly into the servers you are having trouble with to see if problem still appears.

10. The server VGA resolution does not match the resolution of monitor ?

The KVM supports DDC function which will dynamically detect and the DDC data.
The problem may come from the power on sequence.

- For KVM switch
  The recommended power on sequence is - monitor, KVM switch and then servers.
- For remote console box
  It supports DDC function but does not support hot-plug, the recommend power on se quence is – monitor, remote console box and then servers.

PS/2 KVM

Can I connect to Suns (USB type) and/or Macs system to PS/2 KVM switches ?

Yes. Use PS/2 to USB converter (SUN-31 kit) to converter the keyboard & mouse of PS/2 KVM ca-ble (CD-6) to USB interface. The SUN-31 kit includes the built-in mapping of all the Suns & Macs system hotkey.

Troubleshooting

1. There is no LED display on KVM membrane switch

i. Make sure the power adapter plugged into the KVM Switch, if the LED's still off, perform soft reset to KVM switch.

ii. Power cycle KVM switch.

2. I can power on the KVM, but I am not getting any picture at all, how can I solve this?

Switching to another port and checking if this port has the same problem

a. If you switch to another port, please check the screen resolution is the same.

b. Check the OSD menu is available on the hot keys "Scroll lock + Scroll lock + space bar". If the problems persist, please make sure the cables are inserted properly and the boot up sequence is followed.

3. The screen is on but the keyboard and mouse don't work

i. Check the server by using a different keyboard and mouse.

ii. For PS/2 servers
The keyboard and mouse are not hot pluggable.

iii. For USB servers
Unplug and plug allowing a few seconds for the bus emulation process to complete.

iv Do not press any keys on the keyboard whilst the server is booting up. This can cause a keyboard error or cause the keyboard not to detect the KVM switch.

v. Try a different keyboard, but use only 101/102/104-key keyboard

vi. Avoid moving the mouse whilst switching the KVM ports.

4. There is no LED display on the Cat5 dongle

The LED on the Cat5 dongle will flash when plugged into the USB or USB server. The light will then become steady when the KVM switch has connected. If the LED light is on and not flashing when plugged into server, please unplug the USB or PS/2 and try again. Or try another good Cat5 dongle to verify if problem still appears. If the problem persists, please contact your supplier.